

# Work Order ID 81601

**\*81601\***

Page 1

March-16-12 8:35:50 AM

Item ID: D3315-4 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Wearplate  
 Start Date: 15/03/2012 Start Qty: 8.00 **\*8\*** Cust Item ID:  
 Required Date: 29/03/2012 Req'd Qty: 8.00 **\*8\*** Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 12/03/12 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_  
 Run Start **\*NR1\***  
 Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3315	Rev B

100	FLOW WATER JET	0.00							
<b>*100*</b>									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D3315 Dwg Rev: <u>B</u> Prog Rev: <u>B</u> 2-								
1010 .063"	Deburr if necessary								

9 0 Jm 12-6-25

110	QC2- Inspect parts off machine FAI/FAIB	0.00							
<b>*110*</b>									
QC	Memo	0.00							
Quality Control									

9 0 Jm 12-6-25

120	QC8- Inspect parts - second check	0.00							
<b>*120*</b>									
QC	Memo	0.00							
Quality Control									

9 M 12 06 25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 81601

March-16-12 8:35:50 AM

**\*81601\***

Page 2

Item ID: D3315-4 Accept **\*N9000040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Wearplate  
 Start Date: 15/03/2012 Start Qty: 8.00 **\*8\*** Cust Item ID:  
 Required Date: 29/03/2012 Req'd Qty: 8.00 **\*8\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	NC BRAKE	0.00							
<b>*130*</b>									
Brake NC	Memo	0.00							
Brake NC	Form using DT8179 Die and DT8157 as per Dwg D3315 Rev: <u>B</u>								12/06/29
140	QC6- Inspect dimensions to drawing	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									
150	Large Fab	0.00							
<b>*150*</b>									
Large Fab	Memo	0.00							
Large Fab	Weld hard surface using D3315-4T3 as per QSI 004 and Dwg D3315 Rev: <u>B</u>								
	Qty Part Number Description Batch A/R								
	N/A 7560 Hardcoat Rod m122880								

(9)

(X9) ME 12-09-06

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 3

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 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160 QC10- Inspect visual per QSI004- ground welds 0.00

**\*160\***

QC

Quality Control

Memo

0.00

*DAS 16 3-9* *mlady*

170 QC5- Inspect part completeness to step on W/O 0.00

**\*170\***

QC

Quality Control

Memo

0.00

*Smb 12.9.6* *DAS 16 3-9* *mlady*

180 Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 0.00

**\*180\***

Powdercoat

Powder Coating

Memo

START TIME:

FINISH TIME:

OVEN TEMPERATURE:

*11:40*  
*320°F*

*12:10*

*9X*

*mlady*  
*12/09/10*

*m121279*

W/O:		WORK ORDER CHANGES					
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Page 4

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 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 <b>*190*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00							<u>92</u> <u>f</u> <u>12/08/12</u>
200 <b>*200*</b> Packaging Packaging	Packaging  Memo Identify on inside surface using a permanent fine point marker with the following: TCCA-PDA, Dart Aerospace Ltd. P/N: D3315-4/B/N: 81601 BXXXXXXFor Product Eligibility see PDA04-17and StockLocation: <u>500</u>	0.00  0.00							<u>92</u> <u>12/9/11</u> <u>e</u>
210 <b>*210*</b> QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00  0.00							<u>12/9/12</u> <u>20</u>

*ME*  
12-09-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

March-16-12 8:35:55 AM

Page 1

Work Order ID: 81601

**\*81601\***

Parent Item: D3315-4

**\*D3315-4\***

Parent Item Name: Wearplate

Start Date: 15/03/2012

Required Date: 29/03/2012

Start Qty: 8.00

Required Qty: 8.00

**Comments:**

IPP: A05.05.12New issueKJ/JLM  
IPP Rev:B As per Rev B 06-03-24 JLM  
IPP Rev:C Now on Waterjet 07-07-11 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010S16GA		Purchased	No			100	sf	69.0000	2.296	19.33474			

**\*M1010S16GA\***

1010/1025 sheet 16GA

\*\*

Jim 12-6-25

Location

Loc Qty

Loc Code

MAT019

69

116791

21.4

117500

17.6

118965

30

118965

121195

121195

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

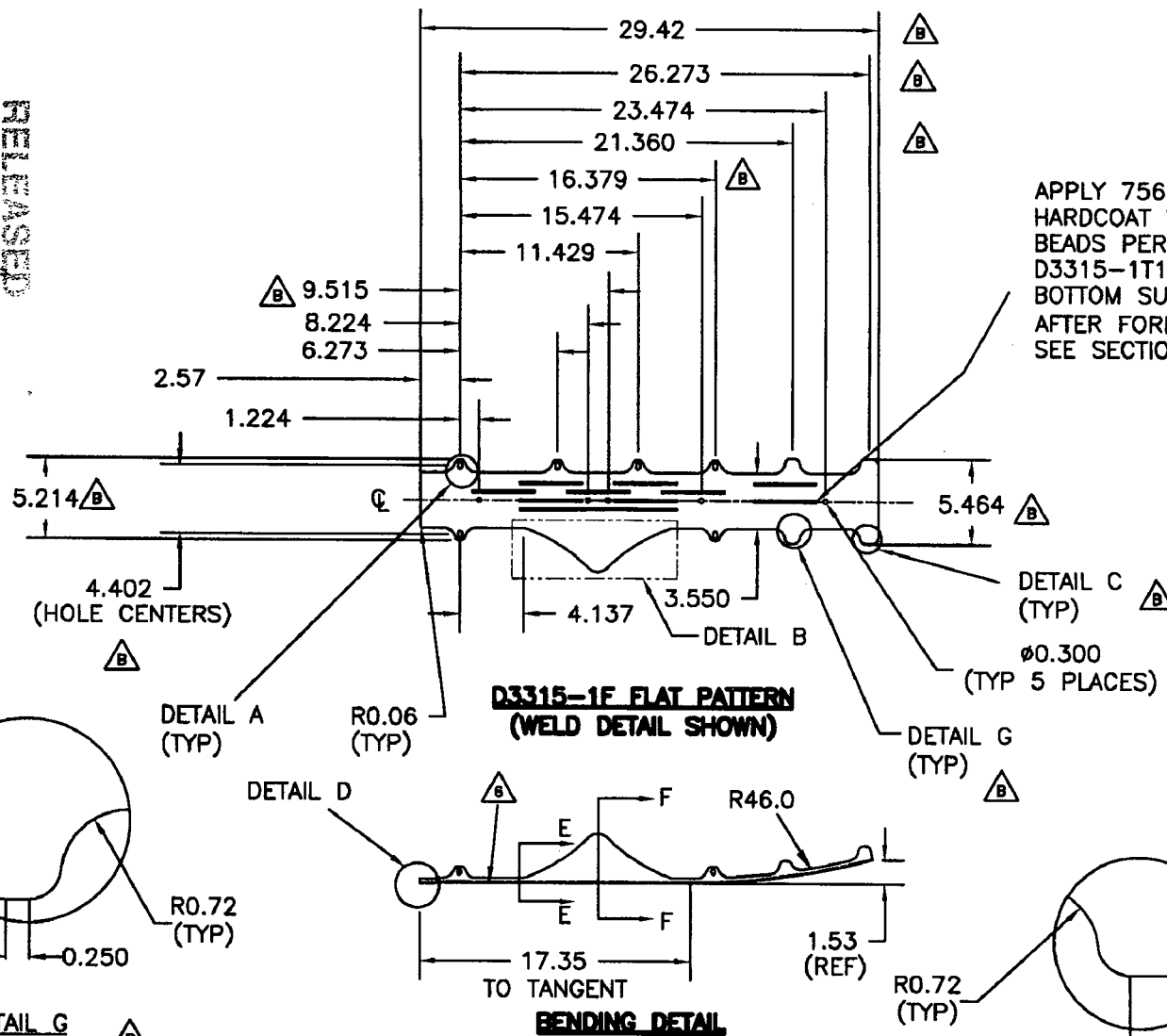
**DART**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

APPLY 7560  
HARDCOAT WELD BEADS PER  
D3315-1T1 ON  
BOTTOM SURFACE  
AFTER FORMING (TYP),  
SEE SECTION E-E

NO. 81601 MLJ  
12/03/16

RELEASED  
06.03.20



**D3315-1 WEARPLATE SHOWN (-2 OPPOSITE)**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
  - 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
  - 3) WELD PER DART QSI 004
  - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 5) ALL DIMENSIONS ARE IN INCHES
  - 6) IDENTIFY ON INSIDE SURFACE AS INDICATED
- TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

DESIGN	DRAWN BY	DART AEROSPACE LTD
04	04	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
04	04	D3315
DATE	TITLE	REV. B
06.01.31	WEARPLATE	SHEET 1 OF 4
A	04.09.10	NEW ISSUE
B	06.01.31	UPDATE DIMENSIONS
		SCALE 1:12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

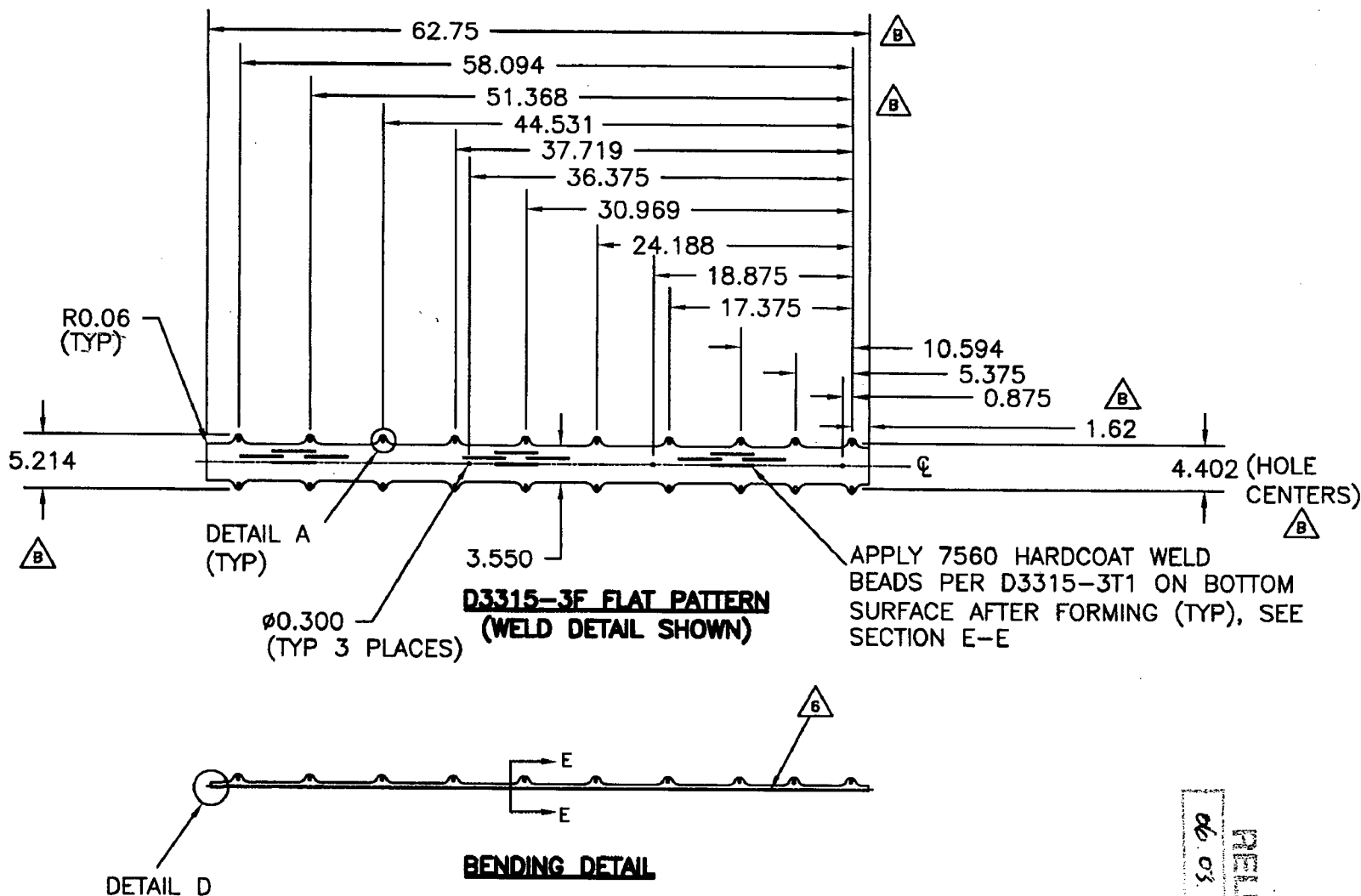
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

81601

**DART****D3315-3 WEARPLATE SHOWN (-4 OPPOSITE)**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

RELEASED  
06 03 20

DESIGN	PH	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED	PH	APPROVED	PH	HAWKESBURY, ONTARIO, CANADA
DATE	06.01.31	DRAWING NO.	D3315	REV. B
		TITLE	WEARPLATE	SHEET 2 OF 4
		SCALE	1:16	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

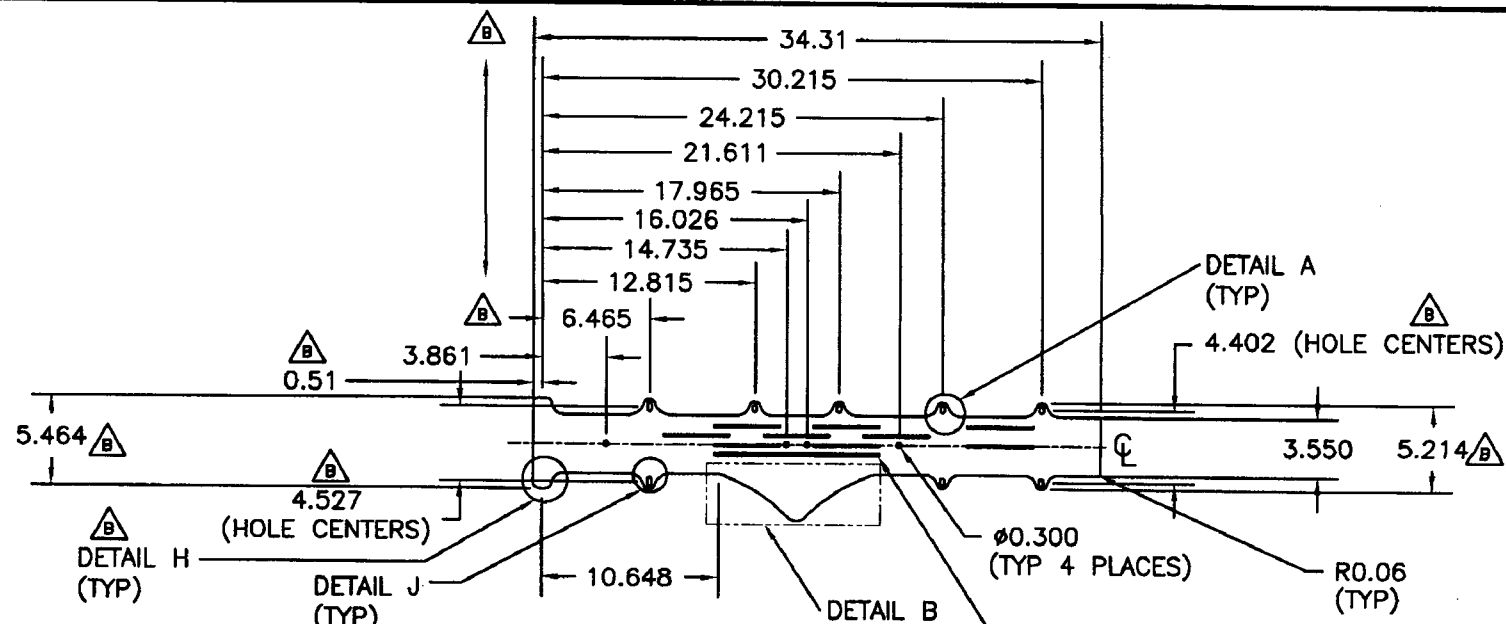
**NOTE:** Date & initial all entries



81601

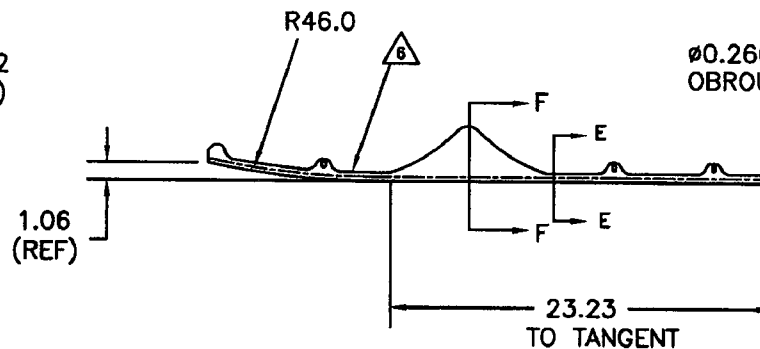
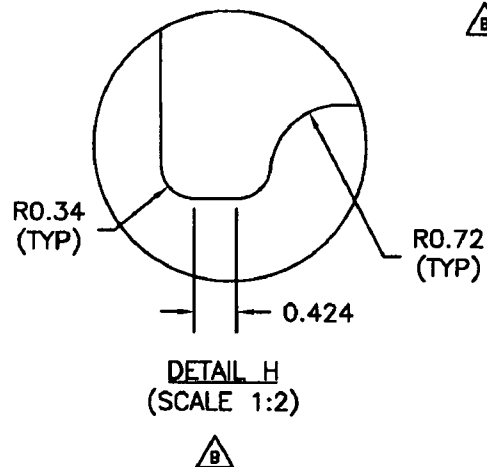
**DART**

DESIGN	814	DRAWN BY	814	<b>DART AEROSPACE LTD</b>
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE	06.01.31	DRAWING NO.	D3315	REV. B
		TITLE	WEARPLATE	SHEET 3 OF 4
		SCALE	1:12	

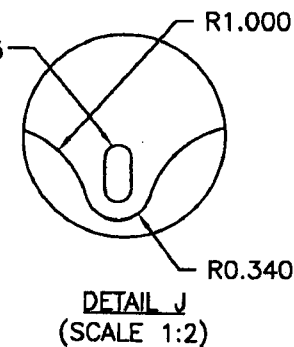


**D3315-5F FLAT PATTERN  
(WELD DETAIL SHOWN)**

APPLY 7560 HARDCOAT WELD  
BEADS PER D3315-5T1 ON BOTTOM SURFACE  
AFTER FORMING (TYP), SEE SECTION E-E



**BENDING DETAIL**



**D3315-5 WEARPLATE SHOWN (-6 OPPOSITE)**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSION ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

W/O:		WORK ORDER CHANGES					
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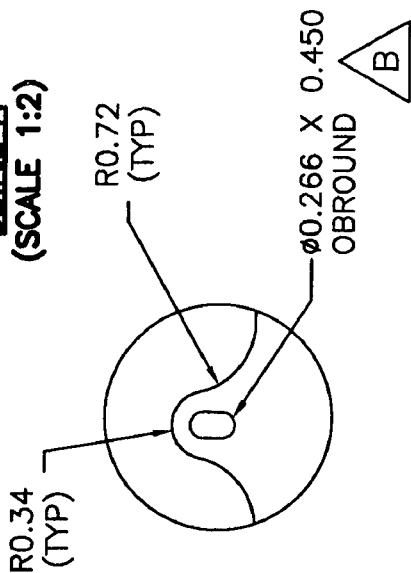
**NOTE:** Date & initial all entries

81601

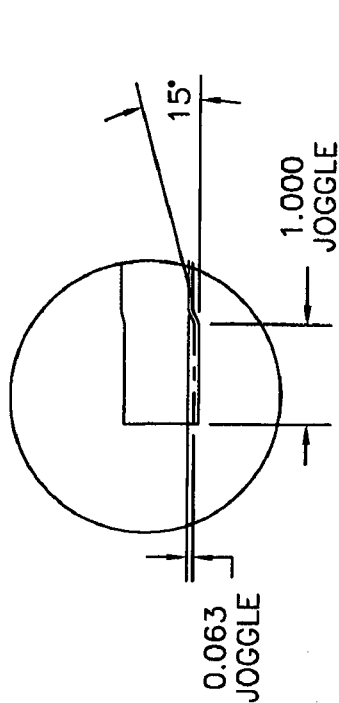


DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3315	REV. B SHEET 4 OF 4
DATE 06.01.31		TITLE WEARPLATE	SCALE NTS

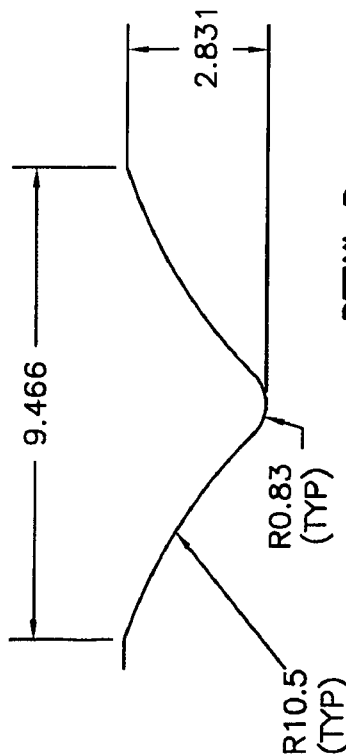
**DETAIL A**  
(SCALE 1:2)



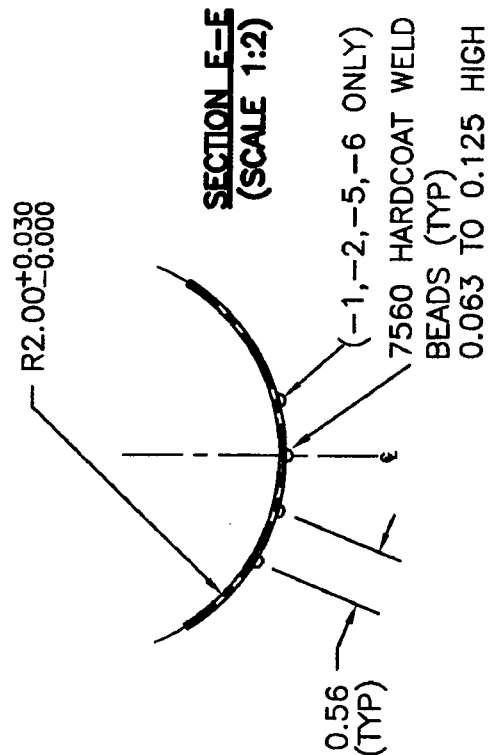
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(SCALE 1:2)



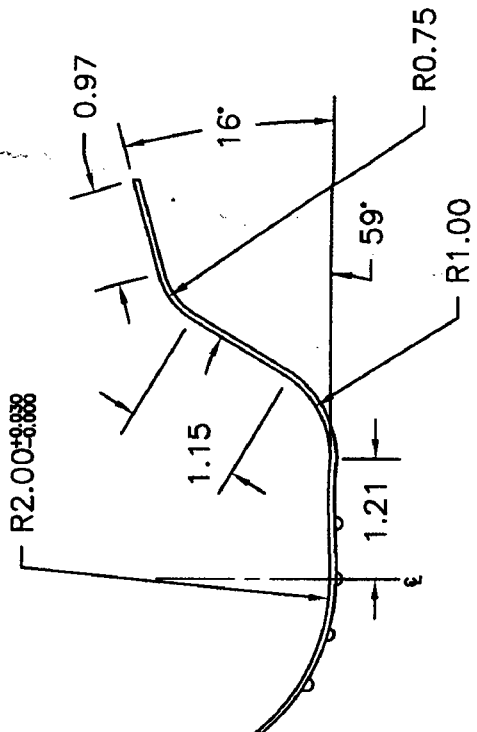
**DETAIL B**  
(SCALE 1:4)



**SECTION E-E**  
(SCALE 1:2)



**SECTION F-F**  
(SCALE 1:2)



RELEASED  
06.03.20

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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